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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
BUTLER, DENNIS

ART UNIT	PAPER NUMBER
2115	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/644,978	DUNSTAN ET AL.
	Examiner	Art Unit	
	Dennis M. Butler	2115	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>31 October 2007</u>.

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1,3-18,20-32 and 34-47</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☒ Claim(s) <u>1,3-18 and 20-31</u> is/are allowed.

6) ☒ Claim(s) <u>32 and 34-47</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

1.   This action is in response to the amendment received on October 31, 2007.

Claims 1, 3-18, 20-32 and 34-47 are pending.

DETAILED ACTION

2.   The text of those sections of Title 35, US Code not included in this action can be

found in a prior Office Action.

Response to Amendment

3.   The objection to the specification has been withdrawn in view of applicant's

amendment to claim 32 deleting the word tangible.

The rejection of claims 32 and 34-47 under 35 U.S.C. 101 has been withdrawn in

view of applicant's amendments to claim 32 and applicant's arguments that the claims

have overcome to recite a machine accessible storage medium that does not include a

propagated signal on page 11 of the amendment.

The rejection of claims 1, 3-18, 20-31 under 35 U.S.C. 103(a) has been

withdrawn in view of applicant's amendments to independent claims 1 and 17 and

applicant's arguments on pages 11-12 of the amendment. Claims 1, 3-18, 20-31 are

allowable over the art of record.

Claim Rejections - 35 USC § 103

4.   Claims 32 and 34-47 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Microsoft, OnNow Power Management Architecture for Applications in view of

Shintani et al., Published US Application 2004/0019906.

Per claim 32:

A)   Microsoft teaches the following claimed items:

1.   configuring a data processing device to recognize a visual on state

(on/working) and a visual off state (sleep) with the operating system determining

and controlling the power states in the Overview of the OnNow Architecture

section and with figure 1;

2.   identifying a request to turn off the data processing device with the user

pushing the front panel button in the Overview of OnNow Power States and

Power Policy section and with figure 2.

3.   transitioning the data processing device to the visual off state instead of

turning off the data processing device with transitioning to the sleep state instead

of transitioning to the soft off state in figure 2, with the Overview of OnNow Power

States and Power Policy section and with the WM_POWERBROADCAST

section on page 4.

B)   The claims differ from Microsoft in that Microsoft fails to explicitly teach

turning audible and visual indicators off in the visual off state as claimed.

C)   However, Microsoft describes transitioning the device between the

working state (visual on) and the sleep state (visual off) with figure 2. Microsoft

describes that the sleep state is the default low power state and in the sleep state

the processor is not executing code and no work is being accomplished for the user in the second paragraph of the Overview of the OnNow Architecture section. In addition, Microsoft describes that an OnNow PC appears to be either on or off to a user and that the OnNow PC enters the sleep state (visual off) when the user pushes the front panel button to indicate that the current work session is over in the first two paragraphs of the Overview of OnNow Power States and Power Policy section. Microsoft clearly recites the goal of giving the user the appearance that the PC is off when it is actually in the sleep state. In addition Shintani teaches that it is known to turn audible and visual indicators off when the system is visually off and capable of processing data in the background with figure 3 and at paragraph 34. It would have been obvious to one having ordinary skill in the art at the time the invention was made to turn off audible and visual indicators in the visual off (sleep) state in order to provide the appearance to the user that the OnNow PC is off as described by Microsoft and to save power in the visual off state. In addition, turning audible and visual indicators off as claimed would intensify the perception that the device is in an off state. It would have been obvious for one of ordinary skill in the art to combine Microsoft and Shintani because of Shintani's disclosure that the audio-visual system can be implemented in a personal computer at paragraph 23. It would have been obvious for one of ordinary skill in the art to combine the teachings of Microsoft and Shintani because they are both directed to data processing systems that provide auxiliary power to processing circuitry while the data processing system

appears off to a user in order to process data and respond to events while the system appears to be off.

Per claims 34-47:

Regarding claim 34, Microsoft describes that the operating system is in control of power state transitions. Microsoft further describes providing API extensions that provide for communication between the operating system and applications. Microsoft also describes interfacing the OnNow system with the ACPI specification. It would have been obvious to one having ordinary skill in the art at the time the invention was made to intercept a turn off request prior to receipt by the operating system in order to route requests such as legacy requests to the BIOS to the operating system. Microsoft describes a human interface device coupled to the data processing device with the display device in figure 1, with the user interface and at the first paragraph of page 3. Microsoft describes that the visual off state is the low power sleep state that turns off the processor at page 2 in the Overview of OnNow Power States and Power Policy section.

Regarding claim 35, Microsoft describes identifying a request to turn on the data processing device and transitioning to the visual on state with the wake-up request, with figure 2 and with the Overview of OnNow Power States and Power Policy section.

Regarding claim 36, Microsoft does not explicitly describe turning audible and visual indicators on and off as claimed. However, Microsoft describes

transitioning the device between the sleep state (visual off) and the working state (visual on) with figure 2. Microsoft describes that the sleep state is the default low power state and in the sleep state, the processor is not executing code and no work is being accomplished for the user. In addition Shintani teaches that it is known to turn audible and visual indicators off when the system is visually off and capable of processing data in the background with figure 3 and at paragraph 34. It would have been obvious to one having ordinary skill in the art at the time the invention was made to turn off audible and visual indicators in the visual off (sleep) state and turn on audible and visual indicators in the visual on (working) state in order to save power in the visual off state and perform audible and visual work in the visual on state. In addition, turning audible and visual indicators on and off as claimed would intensify the perception that the device is in an on or off state.

Regarding claims 37-39, Microsoft describes generating a request to turn off the device by pressing a button on the device, automatically generating the request based on coupled devices and inactivity with the last paragraph on page 2 and with the WM_POWERBROADCAST section on page 4. Microsoft describes identifying a request to turn on the data processing device and transitioning to the visual on state with the wake-up request, with figure 2 and with the Overview of OnNow Power States and Power Policy section.

Regarding claims 40-47, Microsoft describes a human interface device coupled to the data processing device with the display device in figure 1, with the

user interface and at the first paragraph of page 3. Microsoft describes that the

visual off state is the low power sleep state that turns off the processor at page 2

in the Overview of OnNow Power States and Power Policy section. Microsoft

describes that the OnNow system achieves a vision of the always-on PC that can

quickly resume processing. Microsoft describes auto-saving files and device

states when the system is going to sleep. It would have been obvious to one

having ordinary skill in the art at the time the invention was made to intercept

messages from the operating system to a graphics or audio controller and store

the messages to memory in order to resume processing quickly with the audio

and graphics controllers in the proper state to resume processing.

Response to Arguments

5.   Applicant's arguments filed on October 31, 2007 have been fully considered but

they are not persuasive.

In the Remarks, applicant has argued in substance that:

A.   Each independent claim of the application now includes a limitation
directed to: a data processing device configured to recognize a visual on state
and a visual off state,

the visual on state comprising any mode in which the data processing

device is processing data and responsive to requests; and

the visual off state comprising a state identical to the visual on state except
in that all user visible and user audible indicators of activity are turned off.

6.   As to point A, applicant has not amended independent claim 32 to include the

above limitations as stated. Claims 32 and 34-47 are obvious over Microsoft, OnNow

Power Management Architecture for Applications in view of Shintani et al as described

in the above rejection.

Conclusion

7.   Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

8.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Dennis M. Butler whose telephone number is 571-272-

3663. The fax phone number for the organization where this application or proceeding is

assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dennis M. Butler
Primary Examiner
Art Unit 2115